

Michigan Department of Natural Resources & Environment
Recreation Division
Waterloo Recreation Area
Aggregate Industries Inc.
Case #20050400
September 27, 2010

**Questions Submitted by the General Public -
(DNRE responses are shown in Italic)**

1. What will happen to Green Road during the mining? *The mining in the lease area will be phased allowing us to consider all options regarding the future of the road.*

2. What about the "Beauty Road" status of this portion of Green Road? *The Department of Natural Resources and Environment (DNRE) expects that the status of this designation will remain from a point west of the mining operation.*

3. Has the Jackson County Road Commission, which holds a right-of-way across the middle of this parcel, signed off on the proposed extraction plan? *No, one of our next steps is to contact the road commission; this will be done later this year.*

4. What will be the mechanism for addressing real time concerns from residents about operations? *The DNRE will have a contact person who will assist in operational issues, and township regulations will apply. A DNRE contact person will be in place by the time the lease is signed.*

5. What is the status of the restoration bond? *The DNRE will hold a performance bond. The bond will be returned upon proper closure of the project and the reclamation plan being satisfied.*

6. What happens if Aggregate Industries (AI) decides to terminate before 10 years? *The operation will be closed in accordance with the lease and reclamation plan. The DNRE will use the funds provided in the performance bond to complete reclamation if AI fails to properly close and reclaim the site.*

7. How is the Dault portion going to be handled? *The Dault parcel is not part of the agreement.*

8. What happens to the expenses incurred by the township since the last renewal (these would normally be applied to the fees for the reapplication for Operating Permit, but they will not come back to us)? *This is an issue that will be resolved between the township and AI.*

9. What provisions of the township's ordinance will be considered appropriate by the DNRE once they take jurisdiction? *Township sand and gravel regulations will be followed as defined in the lease agreement.*

- 10. What will be the operational administration of AI's operations under the DNRE? Who, What, When, How?** *The Recreation Division (RD) will manage land issues while mineral issues will be handled in partnership with staff from Forest Management Division (FMD).*
- 11. What will happen to the trees along Green Road?** *The trees within the lease area will be removed as needed; trees outside of the boundary will not be impacted. Please keep in mind that during reclamation, extensive vegetation will be replanted.*
- 12. Where will ponding/silting occur once they start the extensive mining on the 72 acres?** *The wash/silting ponds will remain in the existing location, unless moved closer to the active mining operation, as outlined in the reclamation plan.*
- 13 Will there be fencing?** *Fencing will be installed as required for public safety.*
- 14. What safety provisions will be in place for people, vehicles, and the environment on the parcel during operations phases?** *No change in current site safety provisions will take place unless needed.*
- 15. Who and how will they monitor the extent of mining?** *Recreation and Forest Management Divisions will monitor components. There will be an annual mining and reclamation meeting with all parties regarding this lease.*
- 16. Who is going to enforce our day to day ordinance requirements including, operating hours, gate and fencing issues, noise, dust control, tree removal we know is coming on the 72 acre site? Who is the contact for citizen complaints for these and any other issues?** *A DNRE contact person will be in place by the time the lease is signed; this will be in early 2011.*
- 17. Is the DNRE going to enforce our ordinance, or do they have their own?** *The DNRE is not an agent of the township but will follow the operational language outlined in the lease and township regulations.*
- 18. What plans does the DNRE have for the "reclaimed" areas already in the pit and how can these plans be used to address the visual screening issue on the south end of the parcel (just north of Mr. Stockton's parcel). This area is included in the 1st phase of reclamation. The lease calls for this area to be restored into an extensive native grass land habitat.**
- 19. What is the exit strategy for the Dault parcel?** *The Dault parcel is not part of this transaction.*
- 20. When do we get a copy of their restoration plan for the entire 342-acre parcel?** *This will be provided at the township meeting.*
- 21. When will the transaction be official?** *The DNRE expects this to be complete in mid to late 2010. The lease will go to the Transportation and Natural Resources Board on January 27, 2010, and they will take it to the State Administrative Board on February 2nd. The lease date begins 30 days later. Please keep in mind that mining can not begin until the terms of the gift parcel is approved.*

22. I need to know the portions of Sections 1 and Sections 12 of State-owned land that is in the proposal. Specifically I need to know the boundary dimensions on the area north of Green Road and south of Green Road. *This is depicted in the Natural Resources Commission memo and lease, and will be provided at the meeting.*
23. Well monitoring to insure no adverse impacts on the resident's wells in the neighborhood? *Current monitoring will remain.*
24. Environmental Impact Study on Clear Lake, Pond Lily Lake and a large number of wetlands (adjacent to this parcel). A number of inputs to the lakes originate from this parcel. *High clay content in the area allows for perched water bodies and wetland complexes, these systems will be maintained and monitored, the restoration plan also identifies additional wetlands, which will be planted with native vegetation.*
25. Who will be responsible for insuring that gates are locked? *Aggregate Industries.*
26. What is the status of the Performance Bond for reclamation currently held by the township? *This issue will need to be addressed between the township and Aggregate Industries.*
27. Will industrial operations beyond the actual washing, sorting, stockpiling be allowed on this parcel prior to reclamation? *Only on site operations will be allowed.*
28. Will Aggregate Industries be allowed to import waste material onto the site prior to or during reclamation? If not, who will monitor this restriction? *No, this will be monitored by Recreation Division.*
29. If there is any residual hazardous material on the site (above or below ground) who is responsible for the cleanup? *Aggregate Industries will be responsible.*
30. Who is responsible for monitoring hydrology impacts of the operations? This parcel contributes to both the Huron River and the Grand River watersheds. The township has required extensive annual hydrology impact reports, will this continue? *Aggregate Industries will be responsible.*
31. What will be the township's in lieu of taxes for the parcel during the years of active extraction? *A payment in lieu of tax (PILT) will be made on the 324 acres of land as is the case with any land acquisition by the Department. The company remains responsible for any personal property taxes due. PILT payments are made annually to the county.*
32. If Aggregate Industries is obligated to restore the existing gravel pit to some semblance of a "natural state" suitable for recreational use, how does the State intend to enforce compliance? *There will also be annual meetings regarding the status of the project to make sure that progress is being made.*
33. If Aggregate Industries as part of their offer, were able to pass the responsibility for restoration of the original 324 acre hole-in-the-landscape to the State, how would the DNRE (with shrinking budget and resources) ever hope to accomplish that? *Both the Township and State will hold a performance bond, if*

compliance is not met, funds from this bond will cover the State completing this restoration.

34. Why would the State consider trading the extraction rights to 70+ acres of bucolic woodland for the 324 acre landscape scar/former gravel pit, a good deal? *This project includes a long term commitment to restore a 324 ace landscape to DNRE specifications and a royalty directed to the Michigan Natural Resources Trust Fund for future outdoor recreation projects. Stewardship program staff have surveyed a specific boundary for the 73.44 acre lease site to exclude any critical habitat, slope and landscape and limited the area of extraction on a former farmstead that is not overrun with non-native exotic vegetation. Aggregate Industries initially proposed leasing State land East of Loveland Road, this request was rejected due to the native habitats on site.*

35. Is the acreage that will be leased to Aggregate Industries located within the original 12,000 or so acres leased to the state? If it is, does the lease permit the State to lease the property for the proposed purposes? Yes, 35 acres of the lease area was part of the 12,000 acres that was gifted from the National Park Services for public recreation in 1943, the federal gift does not have a process for converting former federal lands, but because there were 13 Land and Water Conservation Fund projects at the Recreation Area, we were asked (in July) to follow the federal LWCF land conversion process. This lease is considered a conversion and we will outline our request and ask for LWCF concurrence.

36. How will Aggregate Industries deeding the land to the State affect the tax revenues of Jackson County, Waterloo Township, the schools and other units of local government? Will Aggregate Industries pay taxes on the 72 acres it leases from the state. In short, what are the effects in terms of reduced tax revenue of the plan? *A project presentation was given to the Waterloo Township board on January 19, 2010. This question was raised at that time and it is my understanding that the county receives around \$2,000 in taxes on this site, and a small portion is sent to the Township. If the property is sold to the state, the DNRE will still pay a PILT tax. (Payment in Lieu of Tax). (estimated at \$650). The state would continue paying the PILT tax on the 72 acres. Aggregate Industries will continue to pay all other personal taxes.*

37. Will mining of the State land impact the water level in Clear Lake or impact local wells?

Mining operations will not affect the level of Clear Lake.

The surface elevation of Clear Lake is approximately 12 feet lower than the groundwater table beneath the state land to be mined. Exploratory borings on the State land to be mined have determined that the groundwater table is between 979 feet and 981 feet above sea level. This correlates with groundwater data from the Michigan Groundwater Mapping Project. The surface of Clear Lake is 968 feet above sea level. If there is a hydrologic connection between the groundwater beneath the state land to be mined and Clear Lake, groundwater would tend to move towards the Lake.

Mining on state land will stop at the groundwater level, except for the creation of several shallow ponds, (0.5- 1.5 acre in size and less than 4 ft deep) which will be created at the

request of the State. These ponds will approximate naturally occurring glacial "kettle" ponds.

Aggregate Industries' existing lagoon system will be used to process the material from the state land. This system has been used for many years without impact to local hydrology, wells or water quality. Water drawn from a created pond is used to wash gravel. The water then flows through a series of ponds, where the fine materials (clay particles and stone fines) settle out. The wash water eventually re-enters the original pond where it is used again. No chemicals are used in the process.

38. Will mining of the State land impact the water quality in water wells or Clear Lake?

Water quality will not be impacted by the mining of state land.

Sand and gravel mining has some potential to increase the vulnerability of an aquifer to be contaminated, because it decreases the distance between the groundwater table and land surface. Without a source of contaminants this change is negligible. Further, the State land to be mined will be restored with native vegetation and will return to recreational use and the closest water well is approximately 2000 feet from the site.

The primary effluent discharged at a sand and gravel mine operation is rinse water. Aggregate Industries' existing lagoon system will be used to process the material from the state land. This system has been in use for many years without impact to local hydrology, wells or water quality. Water drawn from a created pond is used to wash gravel. The water then flows through a series of ponds, where the fine materials (clay particles and stone fines) settle out. The wash water eventually re-enters the original pond where it is used again. No chemicals are used in the process. Suspended solids in the wash water do not pose a groundwater or surface water threat, since sediment is unable to migrate beyond the lagoons.

Chemicals are not used to mine or process the gravel. Only water is used to process (wash) gravel. Only naturally occurring glacial materials, sand and gravel will be mined from the State land.

Possible contaminants include lubricants and fuels. Fuel for on-site vehicles and mining equipment will not be stored on the State land to be mined. Fuel will be stored in above-ground storage tanks equipped with secondary containment to prevent leakage or spillage at Aggregate Industries existing processing plant. Necessary lubricants for mining and processing equipment will be brought to the property in small containers on service vehicles. Handling and storage of petroleum products will be conducted in accordance with all applicable local, state, and federal regulations and should have no adverse impacts on water quality. The threat of contamination is considered less than that for farm land.

The most significant regional factors affecting groundwater are from agricultural and residential activities. These include agricultural and residential fertilizers, herbicides, pesticides, and septic tank discharge that may find their way into the groundwater. Aggregate Industries' operation will not add to, or change, any potential sources of water quality degradation.

39. The 72.44 acres of land that Aggregate Industries will acquire is pristine land,

The State land to be leased is not "pristine." Historical aerial photography and other records document that the lease area was farmed and grazed. A photograph from 1957 shows the lease area to be virtually treeless. Perhaps there is confusion about the location of the area to be mined. The forest is young and dominated by non-native trees. There is considerable invasion by the invasive Asiatic bittersweet vine. Only a few older trees grow in what were once fence rows between fields.

40. The lease area specifically excludes quality oak hickory forest to the north and southwest, yet the DNRE will only receive surface-mined, sub-prime land that cannot be restored to the same natural state as that given up.

The State land to be mined will be restored to a much higher natural condition than the invasive dominated forest that currently exists. Native oak hickory forest will be established using seed of local provenance. White oak, black oak, and pignut hickory will be the canopy dominantes. All are well adapted to growing on dry gravelly soils.

41. The DNRE may acquire more land, but it will never be restored to the same natural beauty or ecological diversity as that given away. This has been shown time and again with surface mining restoration.

This statement reflects a fundamental misunderstanding of the nature of the site to be leased and our proven ability to do restoration.

- 1. The reclaimed land will not provide the same experience for hikers and other recreational users. This will negatively impact the users experience.*

Only one equestrian trail crossed the area to be leased. This trail has already been re-routed with input from the Waterloo Horseman's Association. No hiking trails pass through the lease area. The lease area is approximately one third on one percent of the Waterloo Recreation Area. It is difficult to argue that this is a significant decrease in recreational experience or opportunity. The experience will be different until the trees have time to grow.

42. The Waterloo-Pinckney trail already passes through several reclaimed areas that detract from the hiking experience.

This is the first mine ecological reclamation at Waterloo or Pinckney. However, Waterloo and Pinckney have many areas of old farm land that are now dominated by black locust and other invasive plants, similar to the area to be leased for mining.

43. Why would the DNRE want to give up what is still in a relatively natural state? You may acquire four times the land area, but the land will not be quality land by any stretch.

If the State does not acquire Aggregate Industries' 324 acres there is great likelihood that the area will be developed as residential subdivision. This most certainly will alter the recreational experience of a large portion of the surrounding recreation area. There are many, many examples of this in state parks and recreation areas in southeast Michigan. This will impact the quality of life for residents of Clear Lake as well.

Given time and restoration the Aggregate Industries property will be of high natural resource and recreational value. The Aggregate Industries gift includes 13 acres of unmined oak hickory forest and 20 acres of extant wetland adjacent to Lilly Pond Lake. A quality ecological restoration plan has been developed and will be implemented for the remainder of the site.

44. The 72.44 acres will allow AI to mine closer to Clear Lake. This will have significant negative impacts on Clear Lake residents and wildlife. There will be increased noise, truck traffic, air pollution, and dust. The latter will contain dangerous silicate dusts which are known respiratory toxicants and carcinogens.

The existing processing plant will be used; truck traffic and routes will remain similar to current levels. The majority of roads in the Waterloo Recreation Area are gravel, built from similar aggregate materials. Aggregate Industries will comply with all air quality and other environmental regulations.

45. The location of the new mining operations will have a negative effect on Clear Lake property values.

Property values are not expected to change and the Aggregate Industries Mine has been in operation for many years.

46. The mine may impact the aquifer that supplies Clear Lake. Despite assurances from the geologists, one can never be sure what will happen when one impacts groundwater sources.

Mining operations will not affect the level of Clear Lake or the groundwater table.

47. This land swap is a bad deal.

This is not a land swap. It is a gift of land from Aggregate Industries and the issuance of a mineral lease. The State acquires 324 acres by gift and leases 72 acres for a set period of time.